'Ganada' Yellow Bluestem

NEW MEXICO STATE UNIVERSITY

Circular 502
Cooperative Extension Service

'GANADA' YELLOW BLUESTEM

'Ganada' yellow bluestem (*Bothriochloa ischaemum* var. ischaemum [L.]Keng.), one of the Old World bluestems, is a vigorous, drought-tolerant grass. It is well-suited for soil stabilization and for revegetation of deteriorated rangeland and abandoned crop land. With good moisture and adequate fertility, yellow bluestem forage production can be very high. Its high productivity and palatability, its persistence under grazing, and its response to high fertilization rates make yellow bluestem an excellent grass choice.

Yellow bluestem is one of the more easily established species for use in reclaiming creosote-infested rangelands.

'Ganada' yellow bluestem was released by the agricultural experiment stations of New Mexico State University, Colorado State University and the University of Arizona and the Soil Conservation Service of the USDA.

Yields of 2 to 5 tons per acre have been reported for 'Ganada' in some areas.

Origin and Description

'Ganada' yellow bluestem seeds were first collected near Tajikistan, Turkestan, in **1934** by the Westover-Enlow expedition and introduced as P. I. 107017. It was tested as **A-1407.**

Yellow bluestem is an introduced, warm-season, perennial bunch grass. The erect plant is **24** to **61** inches (60 to 155 cm) tall, and tends to form a large saucer-shaped clump with the stems curving upward from the perimeter. The stems are pale yellow with dark joints, or nodes.

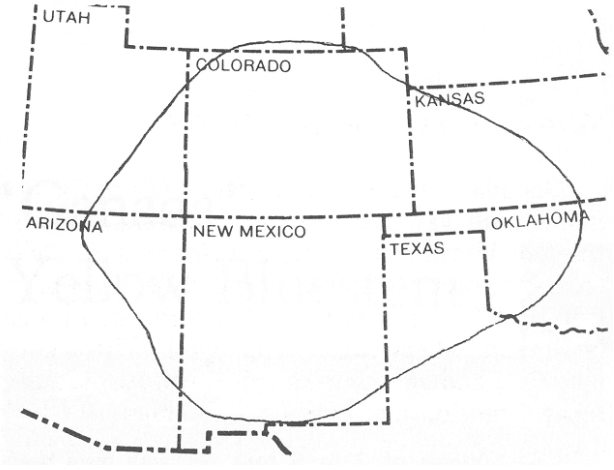
The leaves, mostly basal, are 10 to **12** inches **(25** to **30** cm) long and .1 to .15 inches **(3** to **4** mm) wide. They are slightly rough at the top and have long hairs scattered near the leaf base. Leaves are generally light green in color. The seed heads are slightly fan-shaped on the ends of long seed stalks.

Suitability

Since it is not a native plant, the full range of adaptation of 'Ganada' yellow bluestem is not yet known. However, in Colorado and New Mexico, where the precipitation is predominately summer rainfall, it does well in a wide range of soils from loamy sands to clays. Yellow bluestem is also used throughout the southern Great Plains – including Kansas, Oklahoma and Texas.

It is winter hardy as far north as Colorado Springs and Akron, Colorado, and in areas where the average low temperature is between -10 and **-20** °F **(-23** and **-29** °C). 'Ganada' yellow bluestem **has** done well from elevations of **4200** to 6000 feet **(1280** to **1830** m) and in areas with average annual precipitation of **9.5** to **14** inches **(24** to **36** cm).

Herbage production was good when 'Ganada' yellow bluestem was evaluated under irrigation at the USDA-SCS Plant Materials Center at Los Lunas, New Mexico. In Oklahoma, yields of **2** to 5 tons of dry matter per acre **(4.84** to **11.2** metric tons/ha) have been reported.



Area of adaptation of 'Ganada' yellow bluestem

Establishment and Propagation

'Canada' yellow hluestem has been established from seed and has persisted on some tough sites near Clayton, New Mexico, and Springfield, Colorado.

To establish 'Ganada' in a pasture or to revegetate rangeland, plant 1.0 to 1.5 pounds per acre **(1.1** to 1.7 kg/ha) of pure live seed. 'Ganada' also spreads aggressively by volunteer seedlings. Under suitable moisture conditions, plants will produce seed from early summer to frost.

Availability

Breeder seed is produced by the Plant Materials Center. Limited quantities of foundation 'Ganada' seed are available to seed growers through the New Mexico Crop Improvement Association.

If you need additional information on seed sources or the use of 'Canada' yellow bluestem, contact your local County Extension Service, or the USDA-Soil Conservation Service.

Established stands of 'Ganada' are able to withstand very heavy grazing without permanent damage.

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